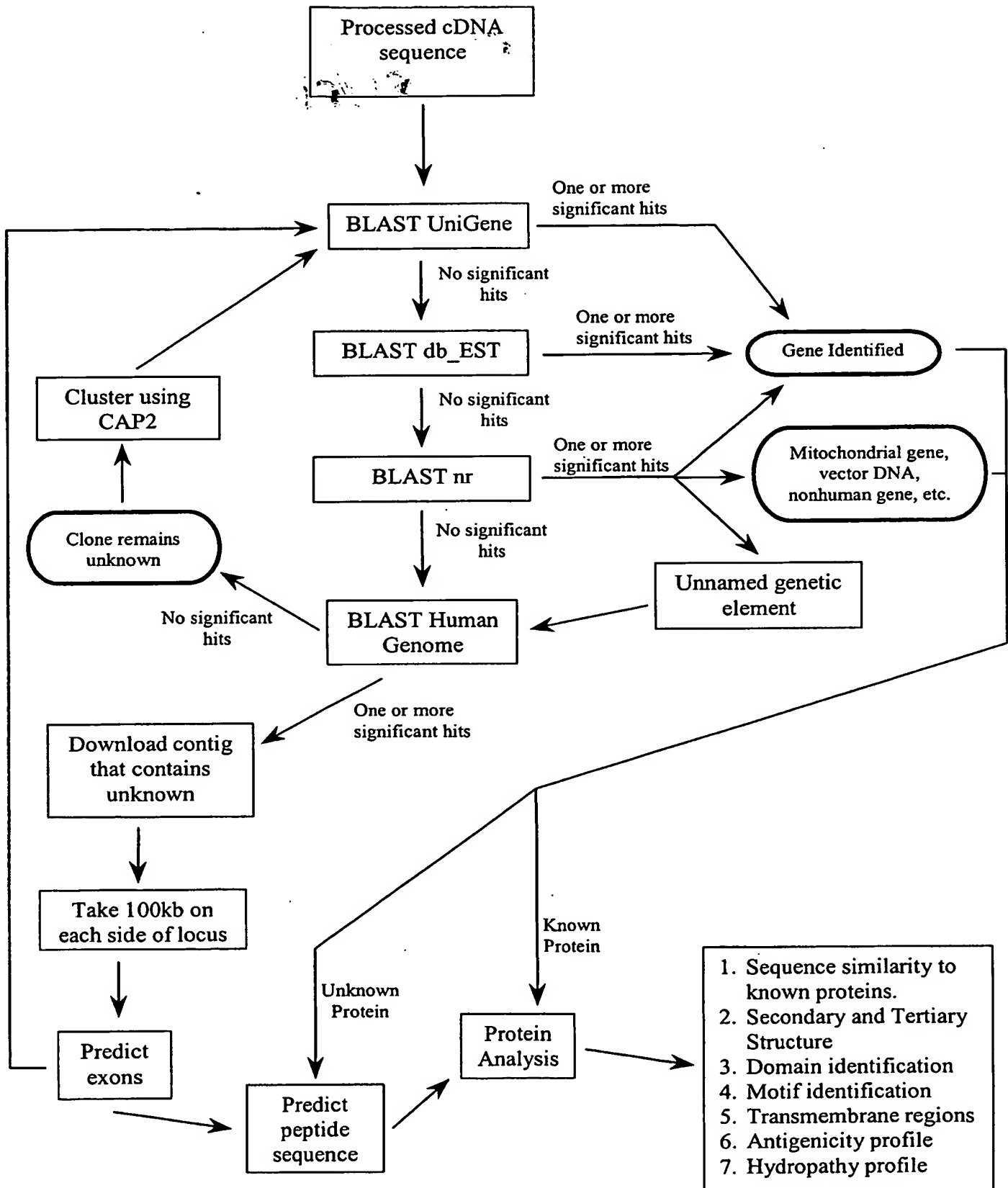
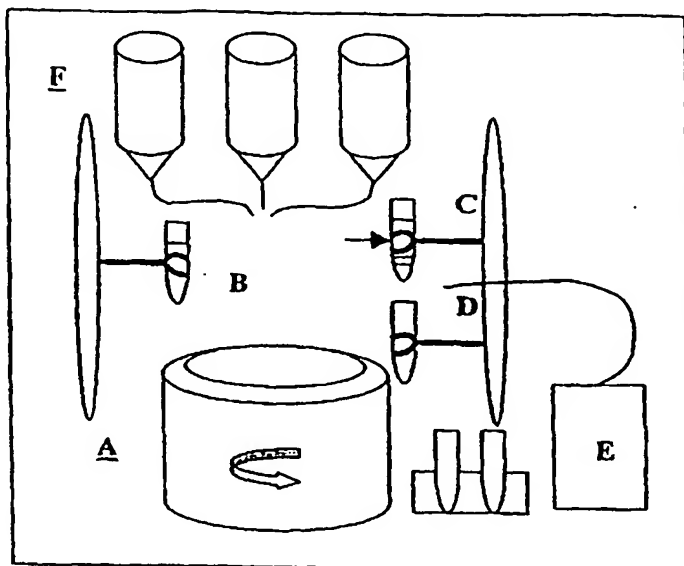


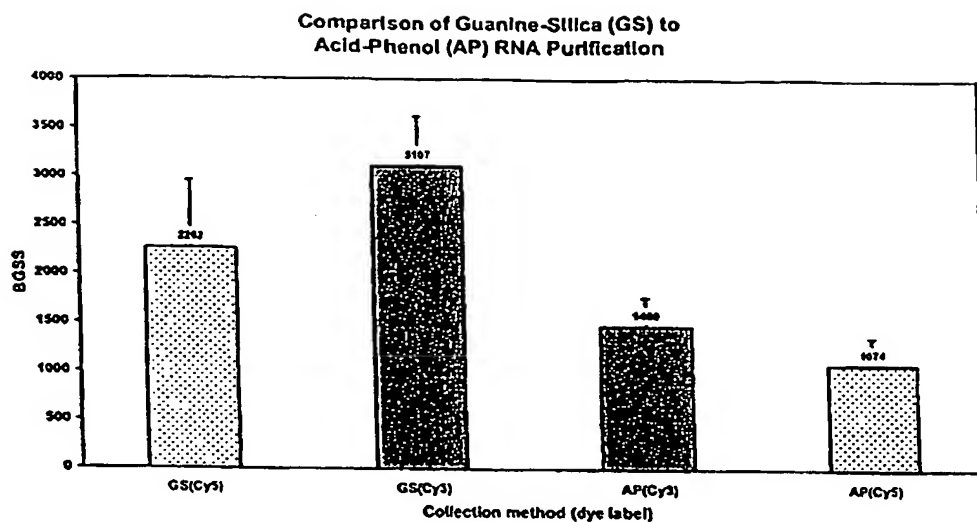
Figure 1: Novel Gene Sequence Analysis



**Figure 2 . Automated Mononuclear Cell RNA Isolation Device**

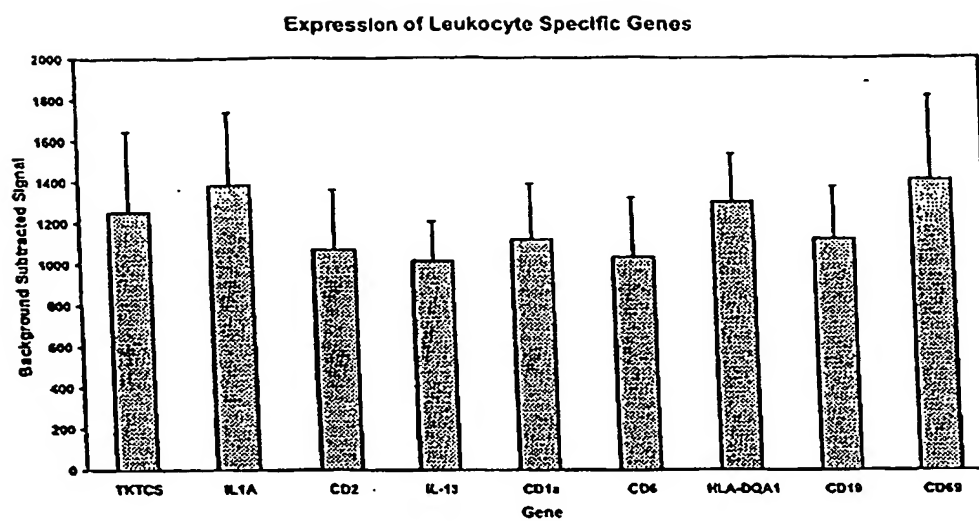
3/15

FIGURE 3



4/15

FIGURE 4



5/15

FIGURE 5

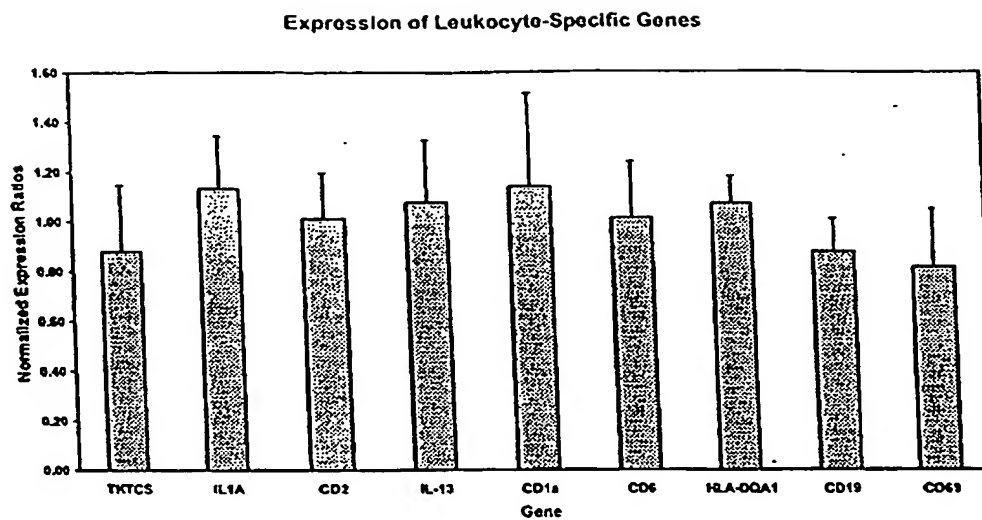
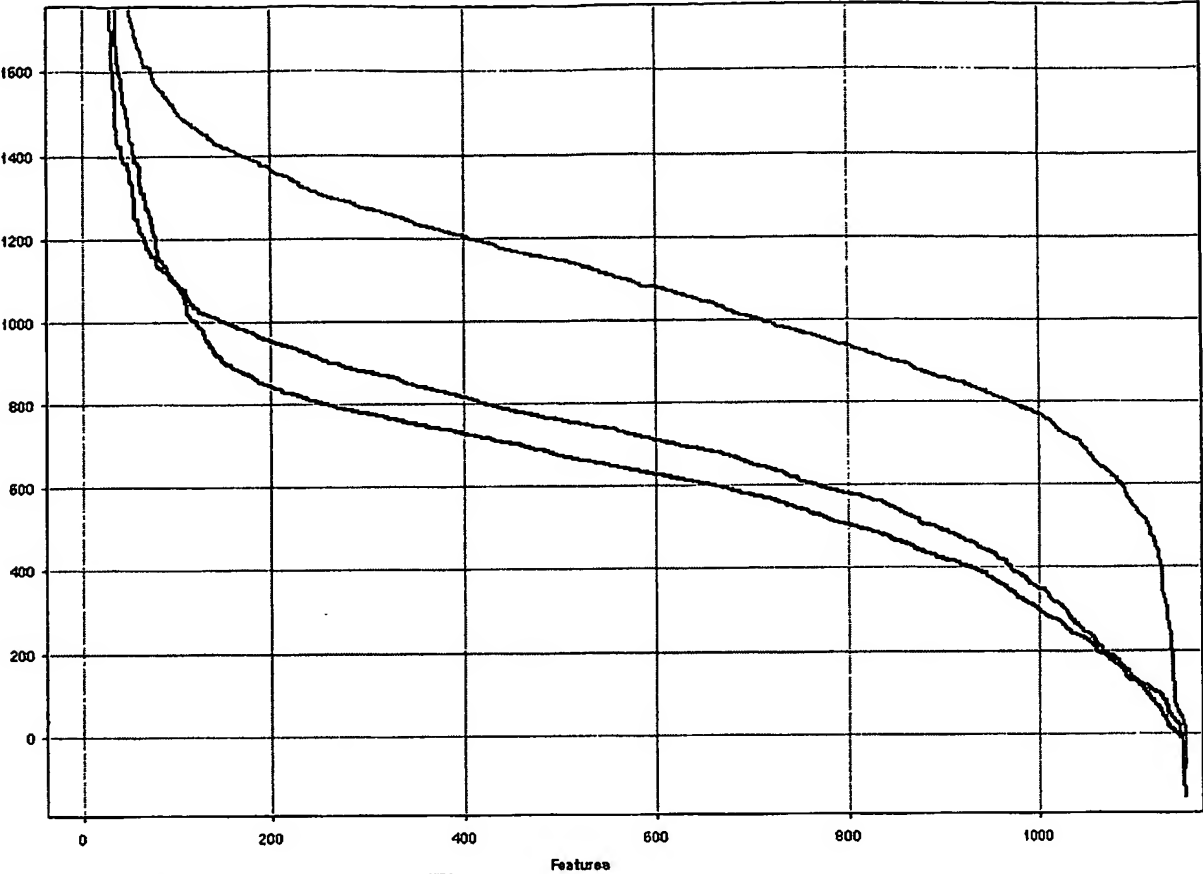


FIGURE 6

Comparison of Control RNAs

Median Cy3 Background Subtracted Signals



All columns use the same scale.

— Mononuclear cells, resting and stimulated

— 10 Buffy Coats, resting

— Mononuclear cells, resting

All markers are connected and ordered by Features.

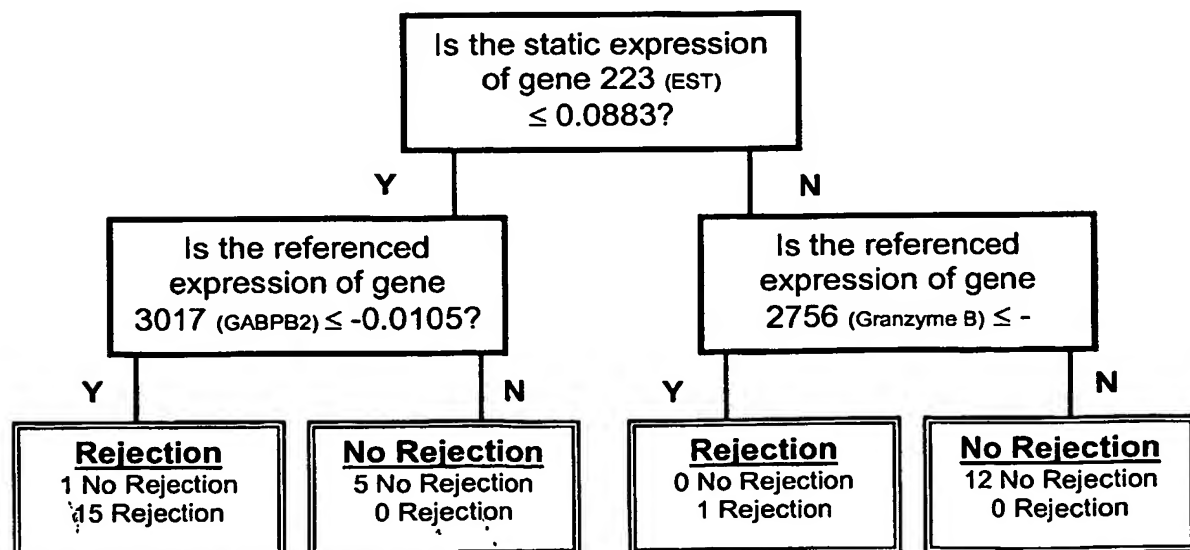
10  $\mu$ g of each control RNA was labeled.

**Figure 7: Cardiac Allograft rejection diagnostic genes.**

A.

Sample	Grade	Marker Gene Expression Ratios				
		3020	3019	2760	3018	85
12-0025-02	0	3.90	3.69	5.49	3.24	3.34
12-0024-04	0	3.66	4.05	5.89	3.75	3.03
15-0024-01	0	3.55	4.01	5.61	2.90	3.23
12-0029-03	0	3.44	3.12	4.25	3.55	3.07
12-0024-03	0	2.88	2.54	2.56	2.20	2.38
14-0021-05	0	1.31	1.03	1.07	0.91	0.99
14-0005-06	3A	0.42	0.27	0.51	0.22	0.26
14-0012-07	3A	0.60	0.62	0.70	0.42	0.61
14-0001-06	3A	0.93	0.71	0.58	0.37	0.44
14-0009-01	3A	0.71	0.63	0.68	0.61	0.66
12-0012-02	3A	0.86	0.85	0.73	0.41	0.72
12-0001-01	3A	1.08	0.97	1.01	0.40	1.06
Average Grade 0:		3.13	3.07	4.14	2.76	2.67
Average Grade 3A:		0.77	0.68	0.70	0.40	0.62
Fold Difference:		4.08	4.55	5.91	6.82	4.28

B. CART classification model.



C. Surrogates for the CART classification model.

<b>Primary Splitter</b>	<b>static 223</b>	<b>ref 3017</b>	<b>ref 4</b>
Surrogate 1	ref 167	ref 102	ref 2761
Surrogate 2	ref 3016	static 36	ref 2762
Surrogate 3	ref 1760	ref 2764	ref 3016
Surrogate 4	ref 85	ref 2759	ref 2757
Surrogate 5	ref 2763	ref 2761	ref 2758



**Figure 8A: Validation of differential expression of Granzyme B in CMV patients using Real-time PCR**

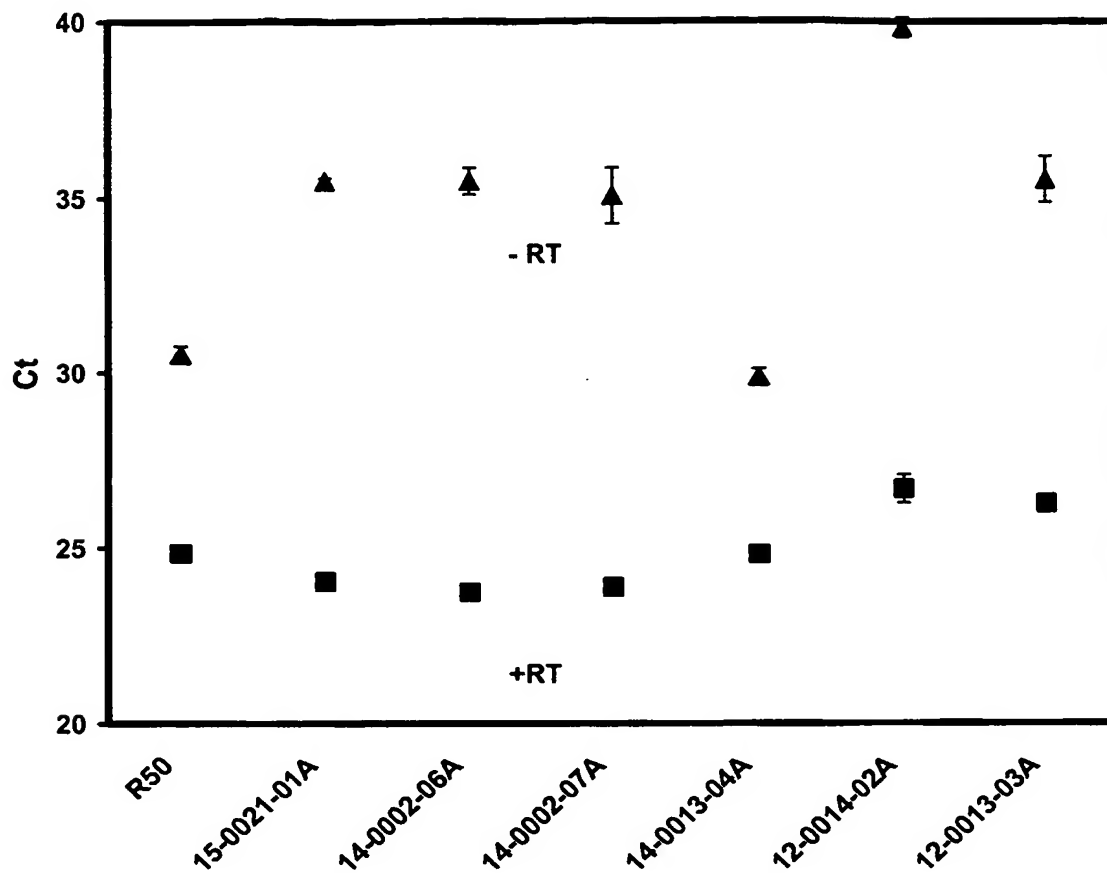


Figure 8B.

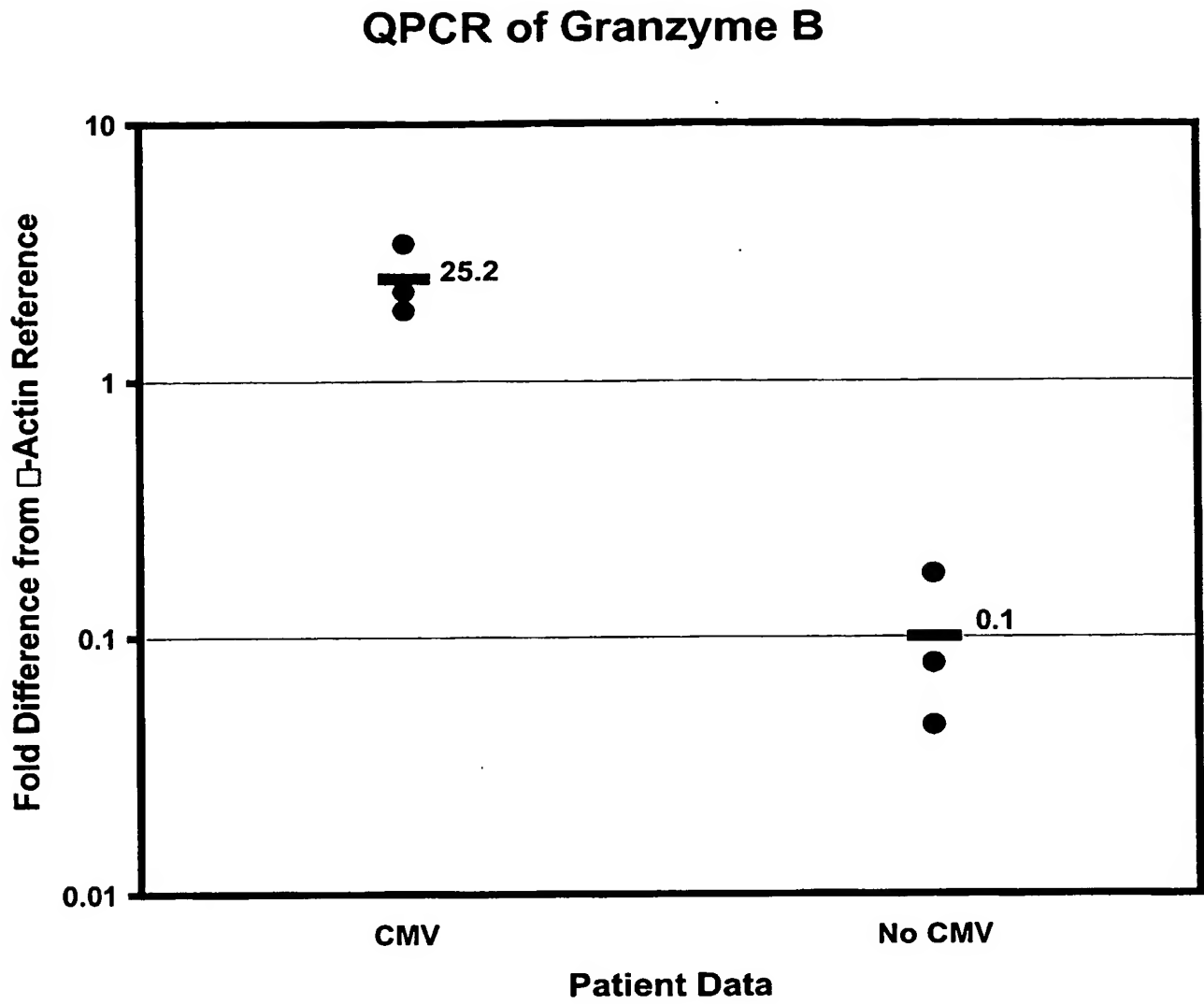


Figure 9

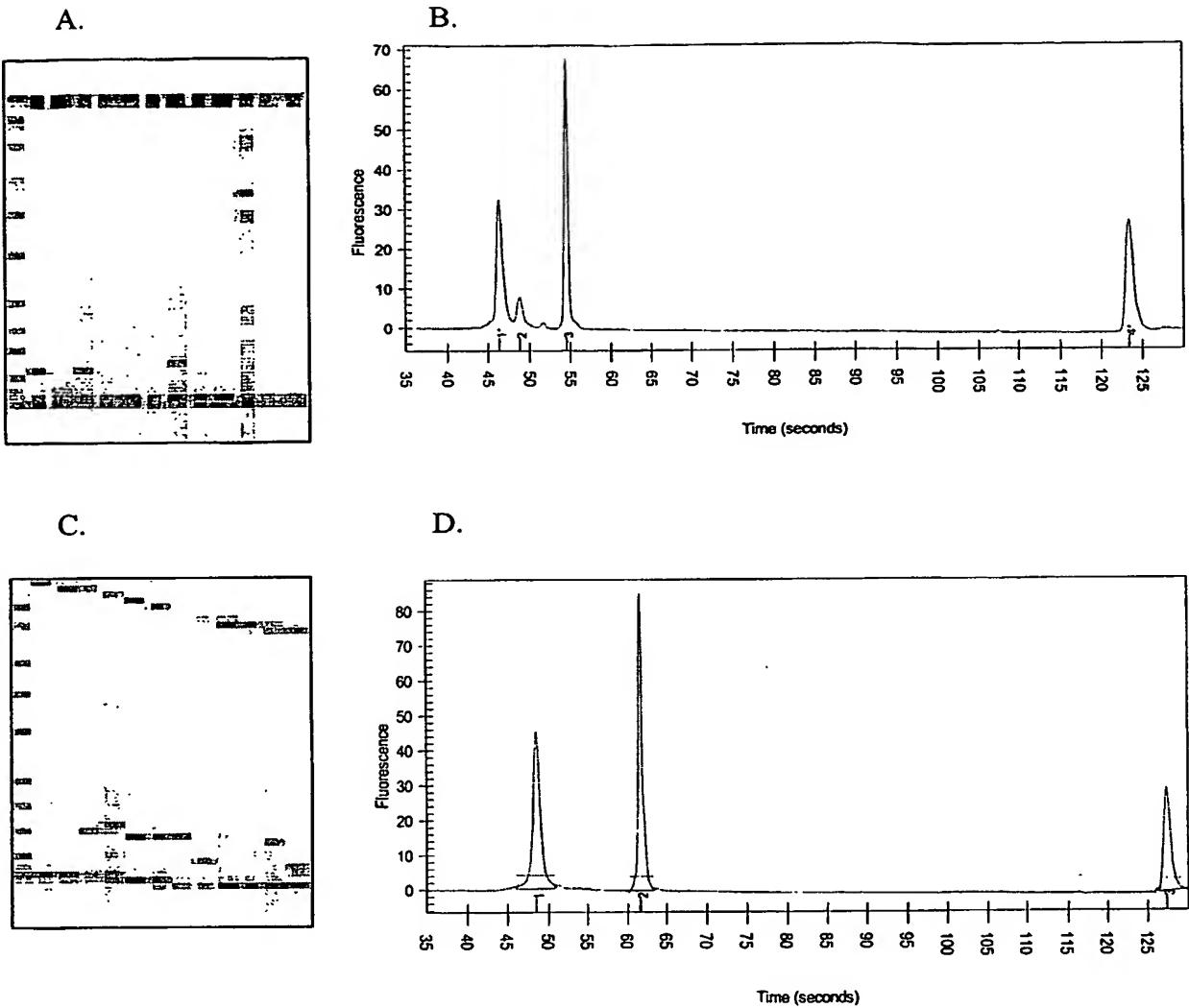


Figure 10

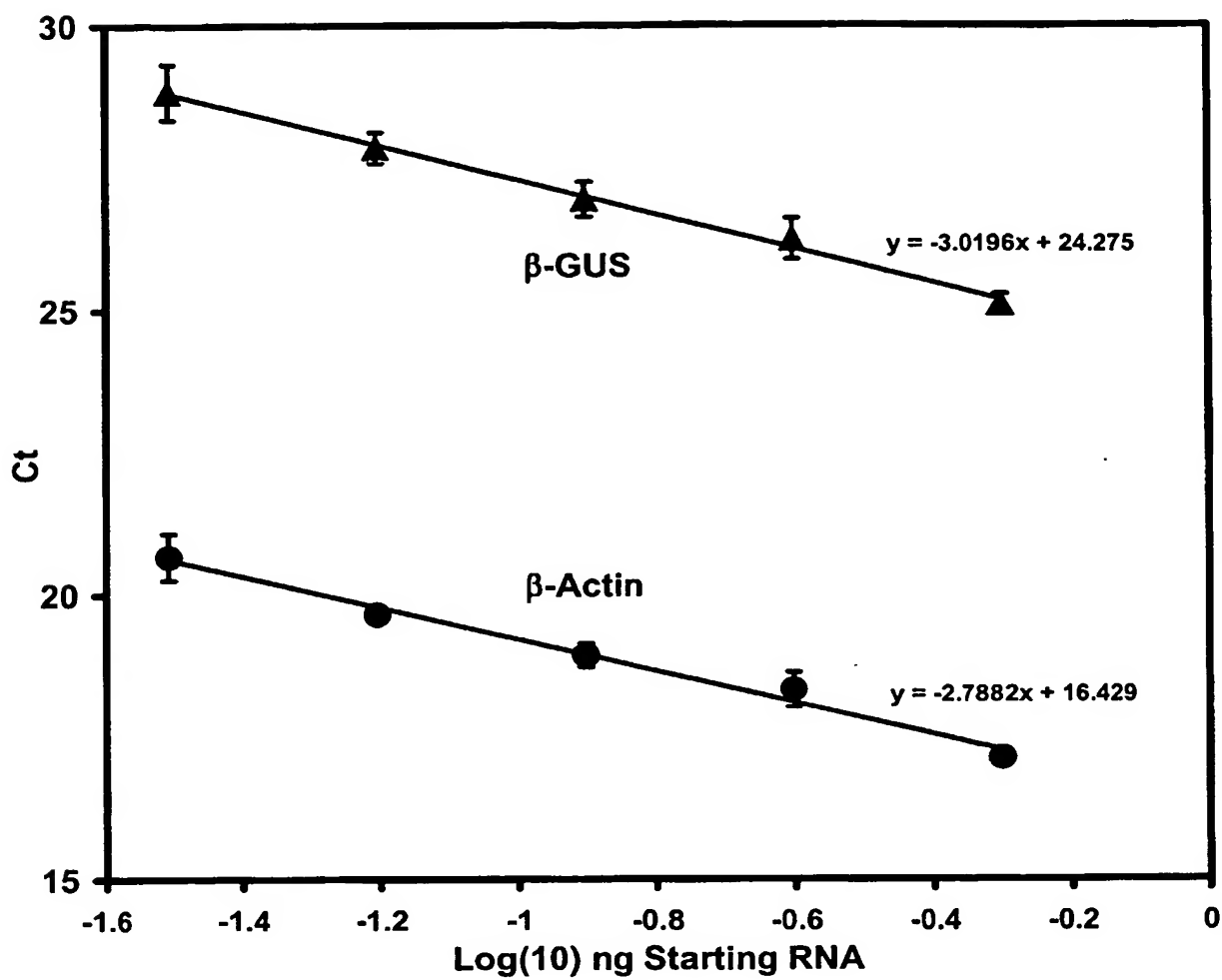
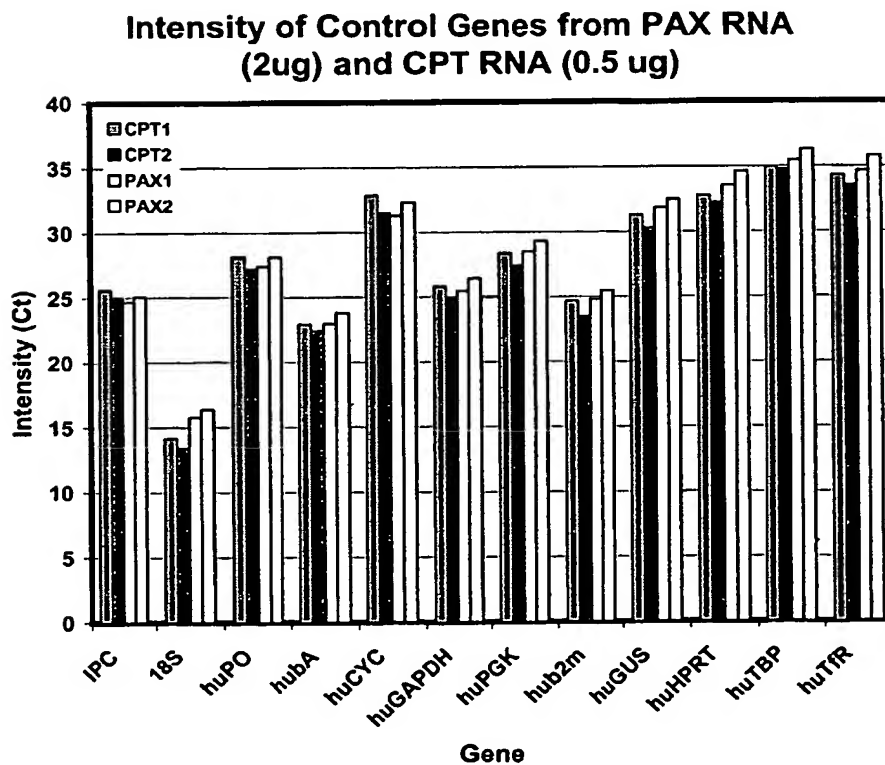
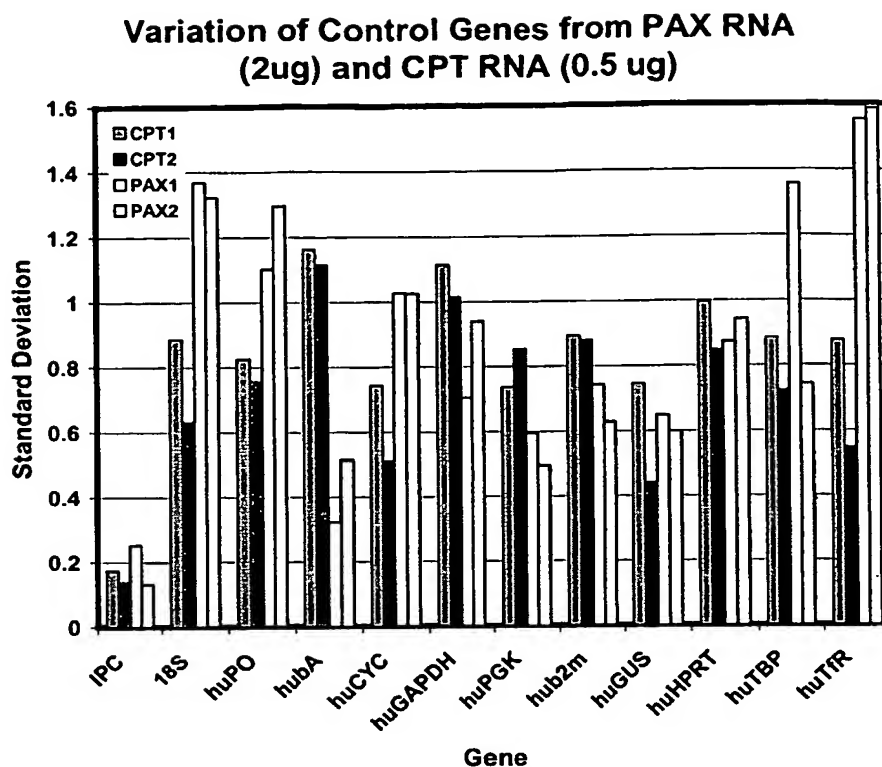
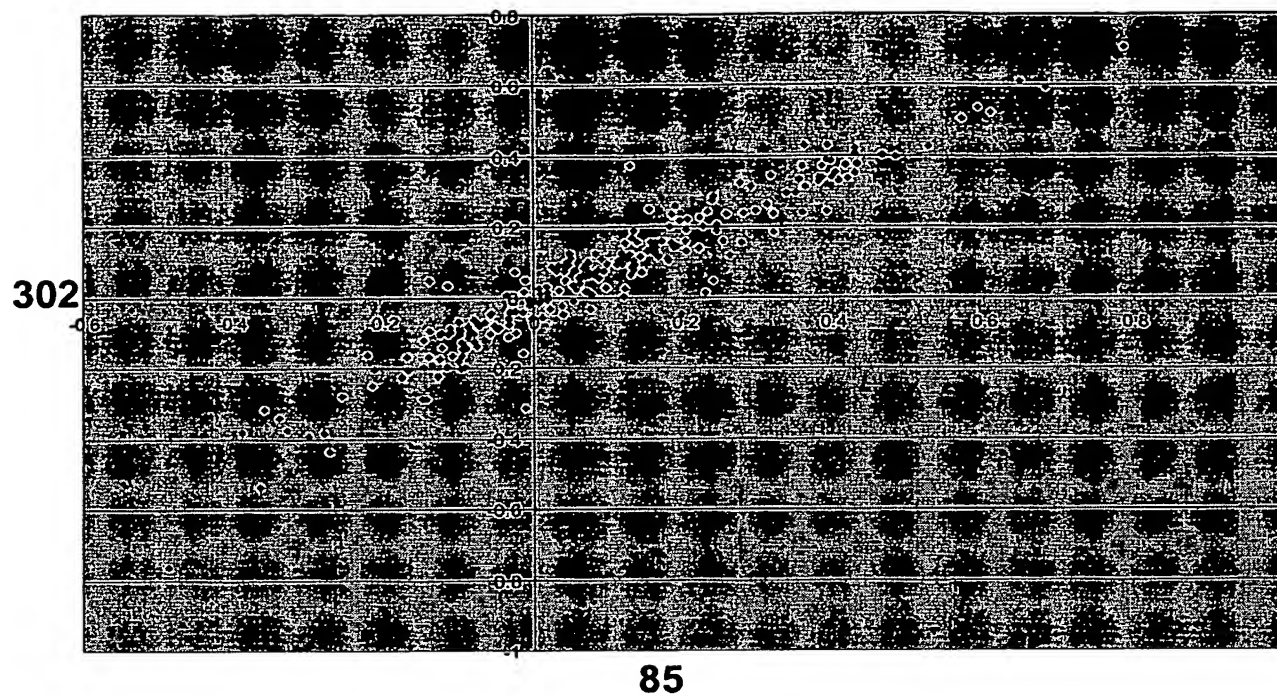


Figure 11

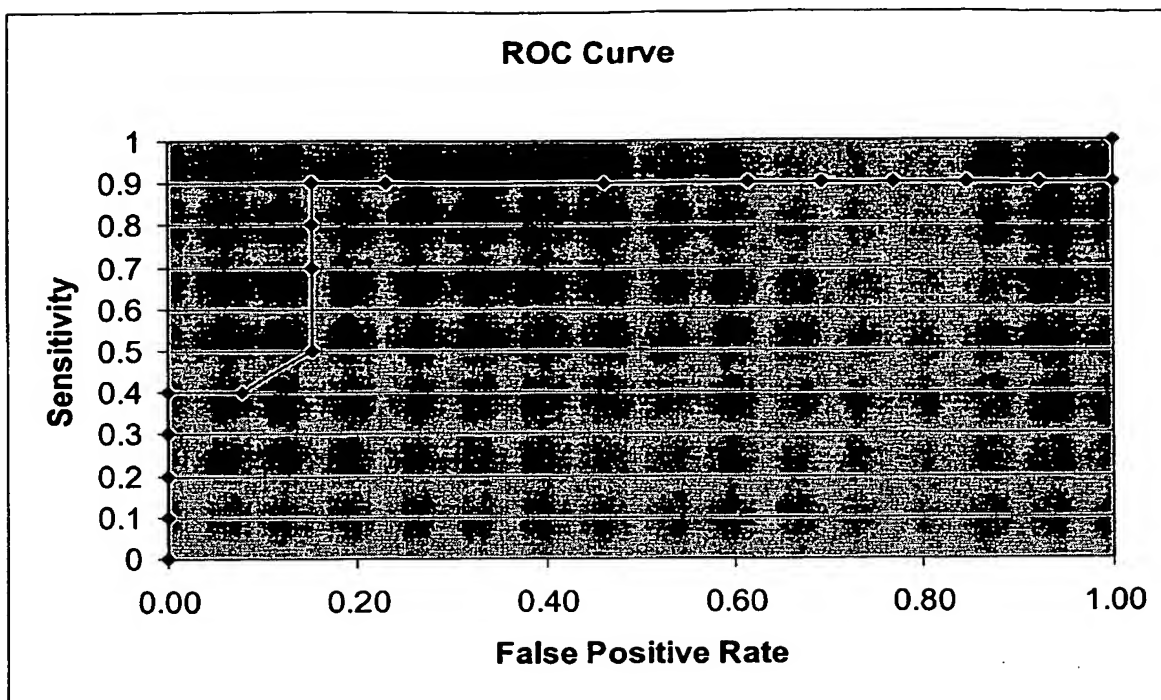


**Figure 12**



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Figure 13



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